

# IPL

## Summer 2002 Preparedness

May 10, 2002



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**We Build**

**We Buy**

**We Conserve**

**... and We Deliver**



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# IPL 2002 Summer Preparedness

- Power Supply
  - Generation - Herman Schkabila
  - Purchased Power - Herman Schkabila
  - DSM - Tate Ayers
- Power Delivery
  - Transmission - Mike Holtsclaw
  - Distribution - Barry Feldman



## IPL Historical Summer Peaks

	<u>1999</u>	<u>2000</u>	<u>2001</u>
MW	2898	2766	2916
Date	7/30/99	8/15/00	8/7/01
Hour	3:00 PM	4:00 PM	4:00 PM
Temp.	98 °F	88 °F	91°F
Relative Humidity	51%	63%	54%
THI	87.2	81.7	82.7



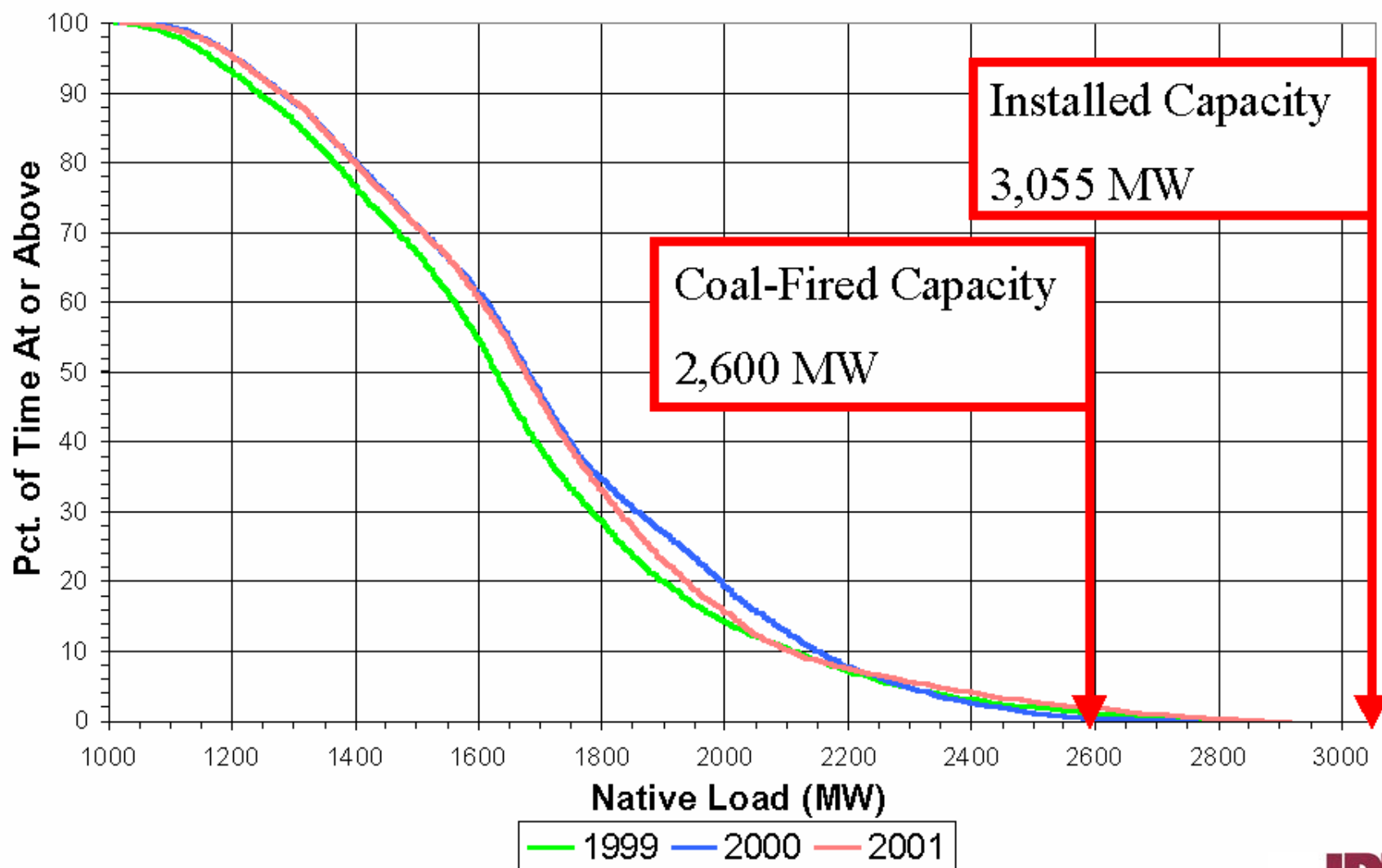
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# IPL Annual Load Profile

1999 Peak Demand 2,898 MW

2000 Peak Demand 2,766 MW

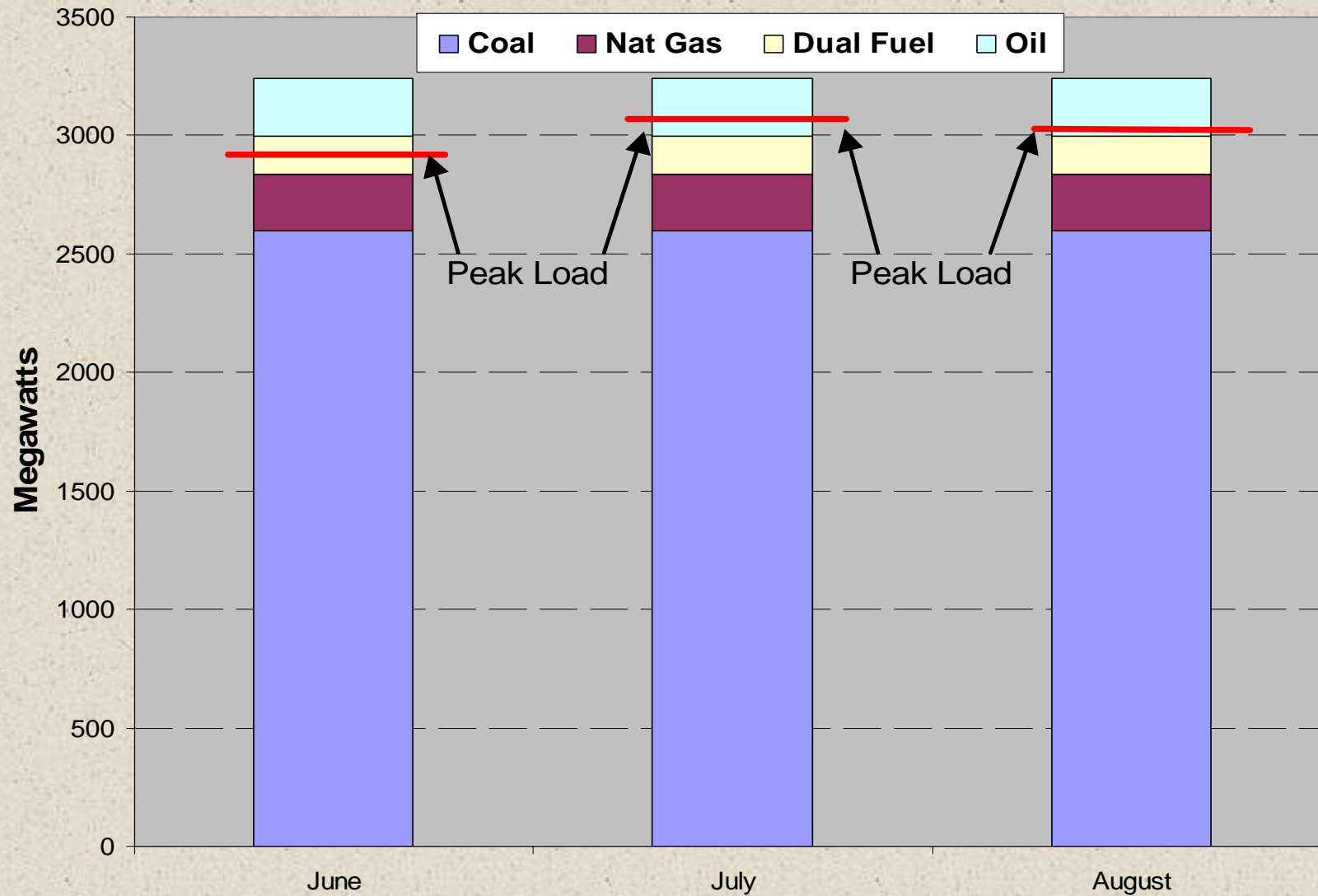
2001 Peak Demand 2,916 MW



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# IPL Generating Capability By Fuel Type

## Summer 2002



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# Forward Market Prices

Date	June	July-August
5/1/1998	28.20	58.25
5/3/1999	58.63	118.00
5/1/2000	67.25	148.00
5/1/2001	68.75	110.50
5/2/2002	37.05	49.85

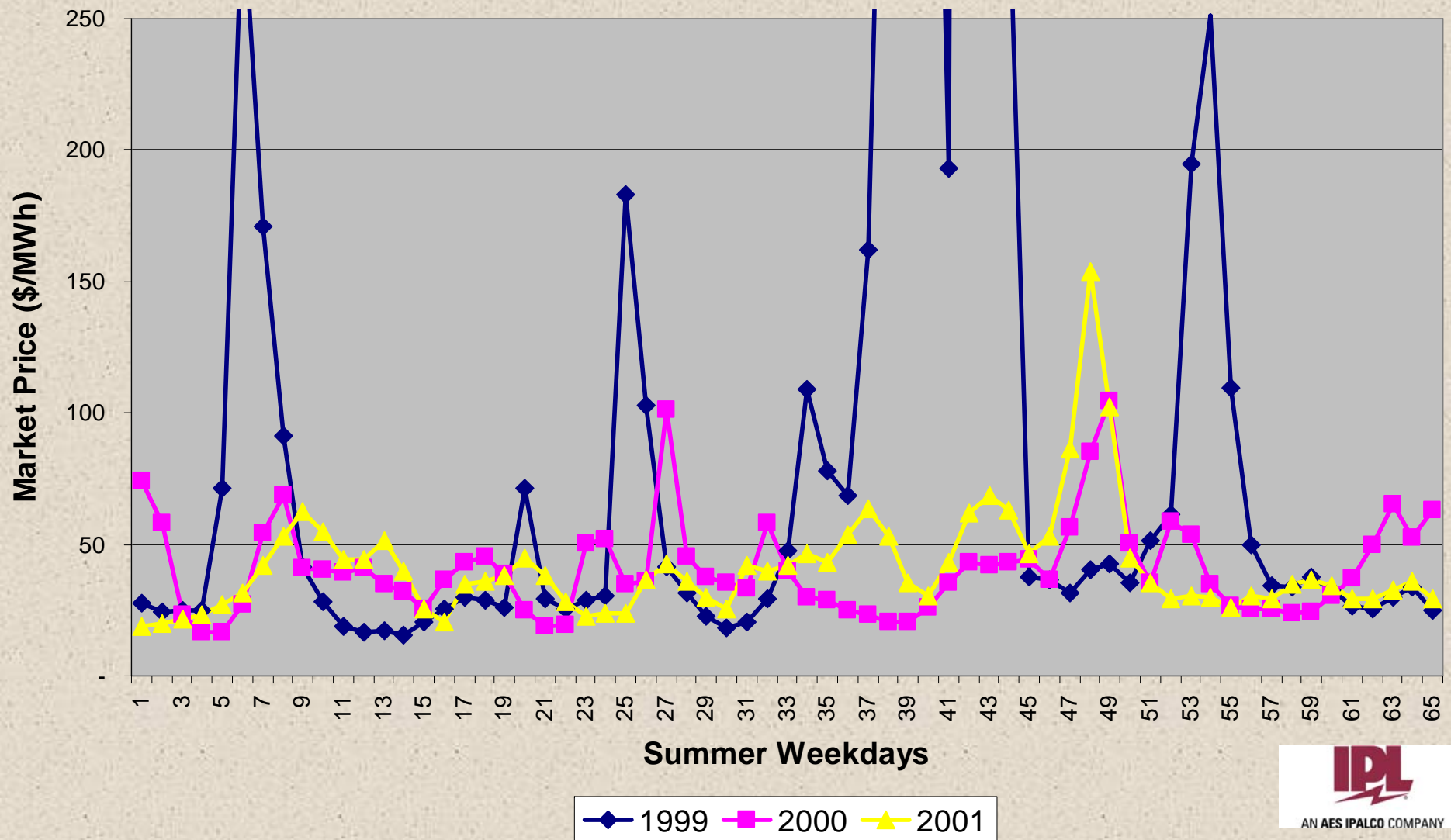


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# Into Cinergy Day Ahead Price Index

## June through August





# ECAR Demand & Capacity

	Summer 1998	Summer 2002	Change
<b>ECAR Demand</b>	<b>93,952</b>	<b>99,346</b>	<b>5,394</b>
<b>ECAR Capacity</b>	<b>104,224</b>	<b>123,464</b>	<b>19,240</b>
<b>ECAR Capacity Margin</b>	<b>10,272</b>	<b>24,118</b>	<b>13,846</b>



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## IPL 2002 Summer Projected Peaks

	<u>June</u>	<u>July</u>	<u>August</u>
Uncontrolled Demand	2986	3138	3089
Load Management & Conservation DSM	145	145	145
Net Internal Demand	2841	2993	2944

Note: Forecasted values are based on a THI of 84.0



# Resources Available to Meet IPL Summer Peaks

## Summer 2002

	<u>June</u>	<u>July</u>	<u>August</u>
<b>Projected Peak (NID)</b>	<b>2,841</b>	<b>2,993</b>	<b>2,944</b>
Existing IPL Owned Generation	3,066	3,066	3,066
Harding Street GT#6	155	155	155
Network Resource (CTE)	19	19	19
Unit Contingent Power Purchase	73	73	73
Firm Purchases (5x16)		100	100
Scrubber Option	19	19	19
<b>Total Resources</b>	<b>3,332</b>	<b>3,432</b>	<b>3,432</b>



## IPL & ECAR Reserve Margins - Summer 2002

	<u>June</u>	<u>July</u>	<u>August</u>
IPL Net Internal Demand (NID)%	16.6	14.5	16.6
ECAR (Stand Alone) NID %	34.4	25.0	25.7
ECAR (With Interchange) NID %	37.0	27.7	28.3

## We Build — Recent Capacity Additions

Unit Name	In Service	Summer Capacity (MW)
HSS GT4	1994	82
HSS GT5	1995	82
GTWN GT1	2000	79
HSS GT6	2002	155



# IPL Current Unit Outages

- Petersburg Unit 1 (232MW) is currently in a planned outage scheduled to be completed on May 10<sup>th</sup>
- Eagle Valley Unit 3 (43MW) is currently in a planned outage that is scheduled to be completed on May 9<sup>th</sup>
- Petersburg Unit 4 (545MW) forced out due to boiler tube leak, expected back within 1-2 weeks



## We Buy

Size	Term	Type
50 MW	Jul-Aug 02	5x16 firm forward
50 MW	Jul-Aug 02	5x16 firm forward
73 MW	May-Sep 02	Unit Contingent

## Beyond 2002 — Buy

- 50 MW 5x16 forward purchase for Jul-Aug 2003
- 73 MW Unit Contingent purchase for May-Sep 2003
- 50 MW 5x16 forward purchase for Jul-Aug 2003, 2004, 2005, 2006



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# Customer Load Management Options

## Summer Demand Impacts (MW's)

				PROJECTED	
	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Rider 14	13	12	12	12	12
Rider 16	12	24	28	19	19
SS-Agreements	6	6	6	5	6
Rider 17		12	10	14	6
Rider 18			20	20	20
Rider 15				27	17
<b>Total</b>	<b>31</b>	<b>54</b>	<b>76</b>	<b>97</b>	<b>80</b>



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## Beyond 2002 — Conserve

- Air Conditioning Load Management
  - IURC Cause No. 42069
  - approved May 1, 2002
  - demand impacts beginning summer 2003

TRANSMISSION

**TRANSMISSION SYSTEM**

**RELIABILITY**

**SUMMER 2002**



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# TRANSMISSION

## IPL Generating Stations and Service Territory



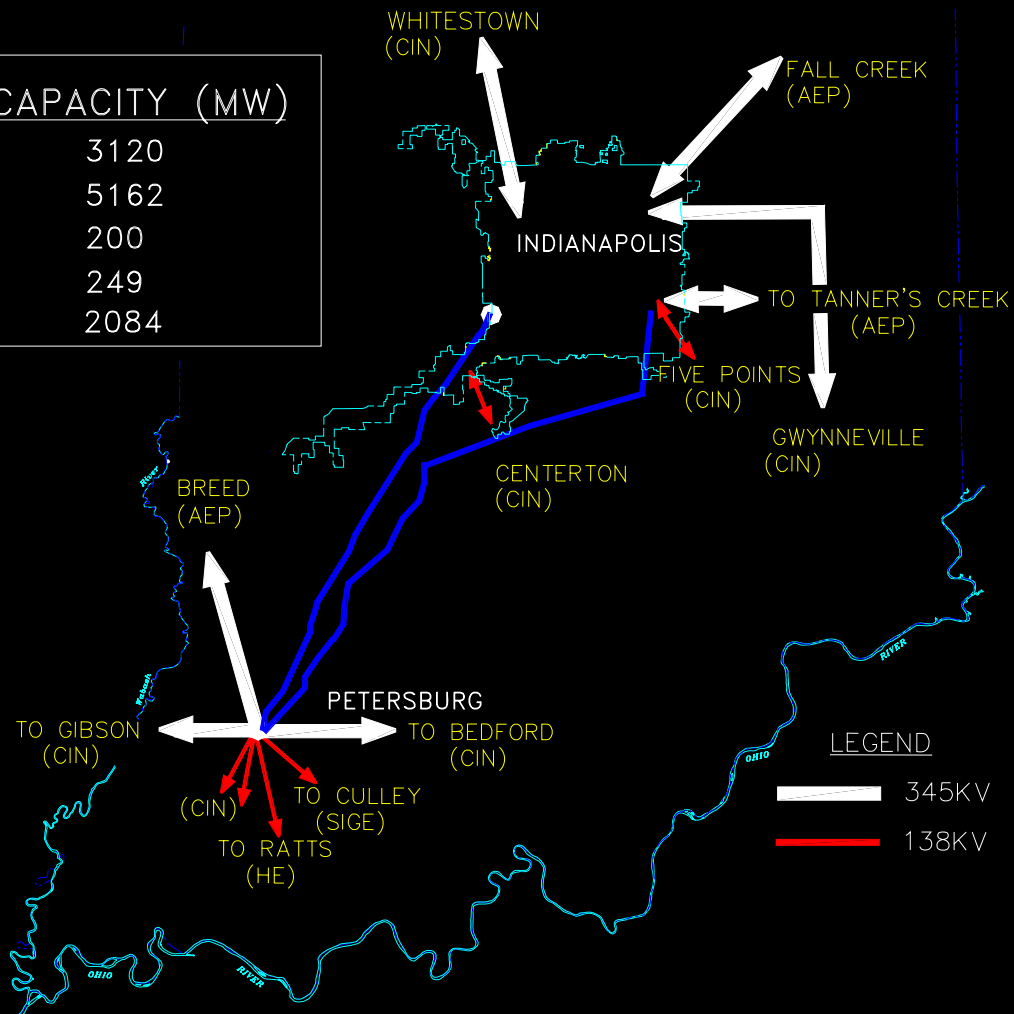
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# TRANSMISSION

## IPL INTERCONNECTION MAP

INTERCONNECT	CAPACITY (MW)
AEP	3120
CINERGY	5162
HOOSIER ENERGY	200
SIGECO	249
ALLEGHENY	2084



# TRANSMISSION

## **ASSESSMENT OF IPL'S TRANSMISSION SYSTEM**

- No Significant Bulk Transmission Capacity Problems Identified for this Summer
- Abnormal System Conditions Could Result in Constraints or TLR's Initiated by Others
- Strong Interconnections with the Neighboring Utilities Provides Robust Import/Export Capability
- Continue to Monitor and Evaluate System Conditions to Maintain the Reliability of the Transmission System

# TRANSMISSION

- **IPL is a Member of the Midwest ISO**
- **Services and Functions of the Midwest ISO are:**
  - **Functional control of all 138 kV and 345 kV Lines, IPL Maintains Operations Control**
  - **They are the Reliability Authority within the MISO Region**
  - **They Coordinate Outage Scheduling for Lines and Major Equipment**
  - **They are the Scheduling Agent for Transmission Services**
  - **They Handle Billing & Settlements for Transmission Services**
  - **They Perform Long Range Regional Planning**




**Midwest ISO Service Territory**

**MISO w/o SPP**  
73,000 Miles of Trans. Lines  
84,000 MW of Generation  
600,000 Sq. Miles

**TRANSLink**  
**SPP**

MANITOBA  
MONTANA  
NORTH DAKOTA  
MINNESOTA  
SOUTH DAKOTA  
WYOMING  
NEBRASKA  
IOWA  
WISCONSIN  
MICHIGAN  
ILLINOIS  
INDIANA  
OHIO  
KANSAS  
MISSOURI  
KENTUCKY  
COLORADO  
NEW MEXICO  
OKLAHOMA  
ARKANSAS  
TENNESSEE  
MISSISSIPPI  
LOUISIANA  
TEXAS

## 600,000 Sq. Miles

 SPP

# TRANSMISSION

## ○ Midwest ISO Key Dates

- **December 15, 2001**
  - **Became Operational, Providing:**
    - **Reliability Authority for Members**
    - **Operational Planning**
    - **Generation Interconnection**
    - **Maintenance Coordination**
    - **Long-Term Regional Planning**
    - **Market Monitoring**
    - **Dispute Resolution**
- **December 19, 2001**
  - **Approved by FERC as the 1st RTO**

# TRANSMISSION

## ○ Midwest ISO Key Dates

- **February 1, 2002**
  - **Began Tariff Administration**
  - **Began Handling Transmission Scheduling**
  - **Began Billing for Transmission Services**
- **February 21, 2002**
  - **Announced Plans to Merge with SPP**
  - **Would cover 20 States & 1 Canadian Prov.**
  - **Encompass 120,000 MW of Generation**
- **April 25, 2002**
  - **TRANSLink Approved by FERC as an ITC**



# TRANSMISSION

- **What Has Changed for IPL With Midwest ISO**
  - **MISO replaced AEP as IPL's Reliability Authority**
  - **Coordinate Schedules for Line & Equipment Outages for Construction and Maintenance**
  - **MISO is Scheduling and Approval Agent for Transmission Services**
  - **MISO Performs Coordinated Regional System Planning**

## DISTRIBUTION

# Reliability Initiatives

- Increase in Line Clearing (Tree Trimming) Budget
  - 17% Increase
- Lightning Arrester Replacement Program
  - Identified Some Poor Performing Equipment
  - 7,000 Arresters



## DISTRIBUTION

### Reliability Initiatives (cont.)

- Changes in Distribution Protection Philosophy
  - Reduce “Flicker” Occurrences
  - Reflects Current Industry Trend
- New Outage Management System Software
  - On Schedule, Fall 2002
  - Ability to Disseminate Information
  - Improved Analysis



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## DISTRIBUTION

# Existing Outage Tracking

- Call comes in through phone center.
- Entered into SRS/OMS mainframe computer system.
- System used to analyze and print paper ticket.
- Paper ticket routed to appropriate dispatcher.
- Dispatched to crew in field.
- Log/tickets are kept for seven years.

## DISTRIBUTION

# Customer Outage Communication

- New Outage Management System
  - #1 Driver for OMS system replacement was better information to give to customers.
  - All “paper ticket” information is available on-line.
  - Goal to give customer Estimated Restoration Times.
- Additional 96 Phone Lines
  - Double Storm Call Taking Capacity
- Additional Call Takers Trained



Questions ???



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